



US 20060063970A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2006/0063970 A1**  
Raman et al. (43) **Pub. Date: Mar. 23, 2006**(54) **METHOD AND APPARATUS FOR  
EXTERNAL STABILIZATION OF THE  
HEART VALVES AND MYOCARDIUM****Publication Classification**(51) **Int. Cl.**  
**A61F 2/00** (2006.01)  
(52) **U.S. Cl.** ..... **600/37**(75) **Inventors: JaiShankar Raman, Chicago, IL (US);  
P. Srirama Rao, San Diego, CA (US)****Correspondence Address:**  
**GORDON & REES LLP**  
**101 WEST BROADWAY**  
**SUITE 1600**  
**SAN DIEGO, CA 92101 (US)**(57) **ABSTRACT**

The present disclosure is directed to an external cardiac basal annuloplasty system (ECBAS or BACE-System: basal annuloplasty of the cardia externally) and methods for treatment of regurgitation of mitral and tricuspid valves. The BACE-System provides the ability to correct leakage of regurgitation of the valves with or without the use of cardiopulmonary bypass, particularly when the condition is related to dilation of the base of the heart. This ECBAS invention can be applied to the base of the heart epicardially, either to prevent further dilation or to actively reduce the size of the base of the heart. Such devices also include an extension thereto for the treatment of localized myocardial defects, scars and damage.

(73) **Assignee: Mardil, Inc., Morrisville, NC**(21) **Appl. No.: 11/156,004**(22) **Filed: Jun. 17, 2005****Related U.S. Application Data**

(63) Continuation-in-part of application No. 10/796,580, filed on Mar. 8, 2004, which is a continuation of application No. 10/236,640, filed on Sep. 6, 2002, now Pat. No. 6,716,158.

